

REMARKS/ARGUMENTS

Favorable reconsideration of this application, in view of the above amendments and the following remarks, is respectfully requested.

Claims 27-34 are pending in this application. Claims 21-26 are canceled without prejudice or disclaimer, and Claims 27-34 are new. Support for the changes to the claims is found in the originally filed disclosure, including the drawings at least in Figs. 19-21 and paragraphs [0075], [0082], [0083], [0093], [0098] and [0099] of the specification. No new matter is added.

In the outstanding Office Action, Claims 21-24 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. 2004/0002364 (Trikkonen) in view of U.S. 2003/0125040 (Walton); and Claims 25 and 26 were objected to but were otherwise indicated as allowable.

Interviews were conducted with Examiner Patel on February 16-17, 2011, to discuss the Office Action and the claimed invention. Applicant thanks the examiner for his time and comments at the interview.

At the interviews, arguments were presented based on the previously pending claims. Although no agreement was reached, the examiner indicated further consideration would be given upon filing of a formal response. However, new claims are submitted herewith for the examiner's consideration.

According to new Claim 27, the claimed configuration provides an effect not provided in the art of record. That is, the claimed weight-related information included in the claimed control information (which includes a set of first and second N-dimensional weight vectors) can be used for a plurality of different frequencies. Therefore, the transmission weights of the plurality of frequencies can be controlled with a smaller amount of control information (relative to a case where control information is transmitted for each frequency).

Trikkonen describes a configuration in which a transmission beam is selected in a MIMO channel, but does not give any description regarding control of handling a plurality of different frequencies. Turning to the claim language, there is no description in Trikkonen as to weight-related information which is **common** to the plurality of frequencies and used as the control information.

Walton describes embodiments in which a CSI (channel state information) is fed back so as to perform transmission control in a MIMO channel, but does not describe a configuration in which weight-related information including N-dimensional weight vectors representing a plurality of transmission weights is notified. At paragraph [0312], Walton describes eigenmodes which may be construed as including information associated with transmission weight. However, with the eigenmodes, the transmission weight is changed depending on a channel state *of each frequency, resulting in different transmission weights among the frequencies.*

In contrast, according to Claim 27, the weight-related information is common to the plurality of frequencies and is used as control information. Therefore, Claim 27 provides an advantage over the cited references in that the use of a transmission weight common to the plurality of frequencies enables a reduction in amount of control information.

As a result, it is respectfully submitted Claim 27 is allowable over Trikkonen and Walton. Although varying in statutory class and scope, it is respectfully submitted Claim 31 is also allowable over the art of record for reasons similar to those noted above regarding Claim 27. Accordingly, it is respectfully submitted the outstanding rejections are overcome by the new claims.

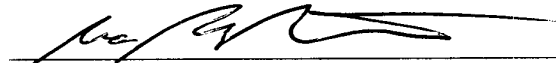
Consequently, it is respectfully submitted no issues remain pending and this application is in condition for allowance. Should the Examiner disagree, the Examiner is encouraged to contact the undersigned to discuss any remaining issues. Otherwise, a timely Notice of Allowance is respectfully requested.

Respectfully submitted,

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